IT IS CLAIMED:

1. An apparatus for applying energy to human tissue, comprising:

(a) means for generating energy, said generating means comprising: (i) means for connecting with means for delivering energy and (ii) means for communicating data;

(b) usage-limited means for delivering energy, said delivering means comprising: (i) a connection end of a construction sufficient for connection with the connecting means of said generating means to provide for energy delivery from said generating means to said delivering means and (ii) a distal end for delivery of energy to the tissue; and

(c) means for transferring data between said delivering means and said generating means, said transferring means associated with said delivering means and operably connectable to the communicating means of said generating means for communicating data therebetween, said transferring means comprising means for storing primary data and for receiving secondary data from the communicating means of said generating means, said primary data including information indicative of usage of said delivering means prior to an energy application and said secondary data including information indicative of usage of said delivering means during or following the energy application.

2. The apparatus of claim 1 wherein the energy is selected from a group consisting of infrared, radio-frequency and ultrasound energy.

3. The apparatus of claim 1 wherein said generating means is a laser.

4. The apparatus of claim 1 wherein the connecting means of said generating means comprises a female connector.

5. The apparatus of claim 1 wherein, upon connection of said delivering means to said generating means, electrical contact is established therebetween.

6. The apparatus of claim 1 wherein the communicating means of said generating means controls the delivery of energy from said generating means to said delivering means.

7. The apparatus of claim 1 wherein, upon connection of said delivering means to said generating means, the communicating means of said generating means provides power to said transferring means.

8. The apparatus of claim 1 wherein, upon connection of said delivering means to said generating means, the communicating means of said generating means receives the primary data from said transferring means.

9. The apparatus of claim 1 wherein, upon connection of said delivering means to said generating means, the communicating means of said generating means alters the primary data stored in said transferring means.

10. The apparatus of claim 1 wherein, upon connection of said delivering means to said generating means, the communicating means of said generating means provides the secondary data to said transferring means.

11. The apparatus of claim 1 wherein the communicating means of said generating means comprises a microprocessor.

12. The apparatus of claim 1 wherein the communicating means of said generating means monitors the energy delivery from said generating means to said delivering means via signals from said transferring means.

13. The apparatus of claim 1 wherein the communicating means monitors the delivery of energy to the tissue via signals from said delivering means.

14. The apparatus of claim 1 wherein said delivering means comprises a male connector at the connection end.

15. The apparatus of claim 1 wherein said delivering means comprises an optical fiber at the distal end.

16. The apparatus of claim 1 wherein said delivering means comprises means for diffusing energy from the delivering means to the tissue, the diffusing means disposed at the distal end of said delivering means.

17. The apparatus of claim 16 wherein the diffusing means comprises a diffusing tip.

18. The apparatus of claim 16 wherein the diffusing means diffuses energy to the tissue in a substantially uniform distribution about the diffusing means.

19. The apparatus of claim 1 wherein the distal end of said delivering means is of a construction sufficient for insertion into the tissue.

20. The apparatus of claim 19 wherein the distal end of said delivering means comprises a tissue-puncturing tip.

21. The apparatus of claim 20 wherein the tip is composed of a material having a thermal conductivity sufficient to avoid producing a hot tip during energy delivery to the tissue.

22. The apparatus of claim 1 wherein said delivering means is limited to one usage.

23. The apparatus of claim 1 wherein said transferring means is disposed on said delivering means such that, upon connection of said delivering means to said generating means, said transferring means is operably connected to the communicating means of said generating means.

24. The apparatus of claim 1 wherein said transferring means and said generating means are operably connectable for communicating data therebetween via means selected from a group consisting of electrical, magnetic and optical means, and any combination thereof.

25. The apparatus of claim 1 wherein said transferring means comprises a microprocessor.

26. The apparatus of claim 1 wherein said transferring means comprises an integrated memory device.

27. The apparatus of claim 26 wherein the memory device comprises an EEPROM integrated circuit.

28. The apparatus of claim 1 wherein said generating means further comprises a key receptacle and said transferring means comprises a key means associated with said delivering means, whereupon manipulation of the key means in the key receptacle, said transferring means is operably connected to the communicating means of said generating means.

29. The apparatus of claim 28 wherein the key means comprises a circuit board including an integrated memory device for electrical coupling with the key receptacle.

30. The apparatus of claim 28 wherein the key means includes an integrated memory device and electrical contacts for electrical coupling with the key receptacle.

31. The apparatus of claim 1 wherein the primary data further includes information selected from a group consisting of delivering means identification, delivering means expiry, delivering means usage, delivering means calibration parameters, type of energy for delivery, operational parameters, energy delivery parameters and monitoring sequence parameters, and any combination thereof.

32. The apparatus of claim 1 wherein the secondary data includes information selected from a group consisting of generating means identification, treatment identification, date of treatment, time of treatment, error indication, error identification,

amount of energy delivery, type of treatment, data integrity, and any combination thereof.

33. An apparatus for applying energy to human tissue, comprising:

(a) an energy generator, said generator comprising: (i) a connector of a construction sufficient for connection with an energy delivery device and (ii) a microprocessor;

(b) a usage-limited energy delivery device, said delivery device comprising: (i) a connection end of a construction sufficient for connection with the connector of said generator to provide for energy delivery from said generator to said delivery device and (ii) a distal end for delivery of energy to the tissue; and

(c) a communication device associated with said delivery device and operably connectable to the microprocessor for communicating data therebetween, said communication device comprising a memory device for storing primary data and for receiving secondary data from the microprocessor, said primary data including information indicative of usage of said delivery device prior to an energy application and said secondary data including information indicative of usage of said delivery device during or following the energy application.

34. The apparatus of claim 33 wherein the energy is selected from a group consisting of infrared, radio-frequency and ultrasound energy.

35. The apparatus of claim 33 wherein said generator is a laser.

36. The apparatus of claim 33 wherein the connector of said generator comprises a female connector.

37. The apparatus of claim 33 wherein, upon connection of said delivery device to said generator, electrical contact is established therebetween.

38. The apparatus of claim 33 wherein the microprocessor controls the delivery of energy from said generator to said delivery device.

39. The apparatus of claim 33 wherein, upon connection of said delivery device to said generator, the microprocessor provides power to said communication device.

40. The apparatus of claim 33 wherein, upon connection of said delivery device to said generator, the microprocessor receives the primary data from said communication device.

41. The apparatus of claim 33 wherein, upon connection of said delivery device to said generator, the microprocessor alters the primary data stored in said communication device.

42. The apparatus of claim 33 wherein, upon connection of said delivery device to said generator, the microprocessor provides the secondary data to said communication device.

43. The apparatus of claim 33 wherein the microprocessor monitors the energy delivery from said generator to said delivery device via signals from said communication device.

44. The apparatus of claim 33 wherein the microprocessor monitors the delivery of energy to the tissue via signals from said delivery device.

45. The apparatus of claim 33 wherein said delivery device comprises a male connector at the connection end.

46. The apparatus of claim 33 wherein said delivery device comprises an optical fiber at the distal end.

47. The apparatus of claim 33 wherein said delivery device comprises a diffuser for diffusing energy from said delivery device to the tissue, the diffuser disposed at the distal end of said delivery device.

48. The apparatus of claim 47 wherein the diffuser comprises a diffusing tip.

49. The apparatus of claim 47 wherein the diffuser diffuses energy to the tissue in a substantially uniform distribution about the diffuser.

50. The apparatus of claim 33 wherein the distal end of said delivery device is of a construction sufficient for insertion into the tissue.

51. The apparatus of claim 50 wherein the distal end of said delivery device comprises a tissue-puncturing tip.

52. The apparatus of claim 51 wherein the tip is composed of a material having a thermal conductivity

sufficient to avoid producing a hot tip during energy delivery to the tissue.

53. The apparatus of claim 33 wherein said delivery device is limited to one usage.

54. The apparatus of claim 33 wherein said communication device is disposed on said delivery device such that, upon connection of said delivery device to said generator, said communication device is operably connected to the microprocessor.

55. The apparatus of claim 33 wherein said communication device and said generator are operably connectable for communicating data therebetween via means selected from a group consisting of electrical, magnetic and optical means, and any combination thereof.

56. The apparatus of claim 33 wherein said communication device comprises a microprocessor.

57. The apparatus of claim 33 wherein said communication device comprises an integrated memory device.

58. The apparatus of claim 57 wherein the memory device comprises an EEPROM integrated circuit.

59. The apparatus of claim 33 wherein said generator further comprises a key receptacle and said communication device comprises a key associated with said delivery device, whereupon manipulation of the key in the key receptacle, said communication device is operably connected to the microprocessor.

60. The apparatus of claim 59 wherein the key comprises a circuit board including an integrated memory device for electrical coupling with the key receptacle.

61. The apparatus of claim 59 wherein the key includes an integrated memory device and electrical contacts for electrical coupling with the key receptacle.

62. The apparatus of claim 33 wherein the primary data further includes information selected from a group consisting of delivery device identification, delivery device expiry, delivery device usage, delivery device calibration parameters, type of energy for delivery, operational parameters, energy delivery parameters and monitoring sequence parameters, and any combination thereof.

63. The apparatus of claim 33 wherein the secondary data includes information selected from a group consisting of generator identification, treatment identification, date of treatment, time of treatment, error indication, error identification, amount of energy delivery, type of treatment, data integrity, and any combination thereof.

64. A disposable device for delivering energy from a source of energy to human tissue, wherein the energy source includes means for communicating data, said device comprising:

means for delivering energy, said delivering means having a connection end of a construction sufficient for connection with the energy source to provide for energy delivery from the energy source to said delivering means and having a distal end for delivery of energy to the tissue; and

means for transferring data between said delivering means and the energy source, said transferring means associated with said delivering means and operably connectable to the communicating means of the energy source for communicating data therebetween, said transferring means including means for storing primary data and for receiving secondary data from the communicating means of the energy source, said primary data including information indicative of usage of said delivering means prior to an energy delivery procedure and said secondary data including information indicative of usage of said delivering means during or following the energy delivery procedure.

65. The device of claim 64 wherein the energy is selected from a group consisting of infrared, radio-frequency and ultrasound energy.

66. The device of claim 64 wherein the energy source is a laser.

67. The device of claim 64 wherein the energy source comprises a female connector for connecting with said delivering means.

68. The device of claim 64 wherein, upon connection of said delivering means to the energy source, electrical contact is established therebetween.

69. The device of claim 64 wherein the communicating means of the energy source controls the delivery of energy from the energy source to said delivering means.

70. The device of claim 64 wherein, upon connection of said delivering means to the energy

source, the communicating means of the energy source provides power to said transferring means.

71. The device of claim 64 wherein, upon connection of said delivering means to the energy source, the communicating means of the energy source receives the primary data from said transferring means.

72. The device of claim 64 wherein, upon connection of said delivering means to the energy source, the communicating means of the energy source alters the primary data stored in said transferring means.

73. The device of claim 64 wherein, upon connection of said delivering means to the energy source, the communicating means of the energy source provides the secondary data to said transferring means.

74. The device of claim 64 wherein the communicating means of the energy source comprises a microprocessor.

75. The device of claim 64 wherein the communicating means of the energy source monitors the energy delivery from the energy source to said delivering means via signals from said transferring means.

76. The device of claim 64 wherein the communicating means of the energy source monitors the delivery of energy to the tissue via signals from said delivering means.

77. The device of claim 64 wherein said delivering means comprises a male connector at the connection end.

78. The device of claim 64 wherein said delivering means comprises an optical fiber at the distal end.

79. The device of claim 64 wherein said delivering means comprises means for diffusing energy from the delivering means to the tissue, the diffusing means disposed at the distal end of said delivering means.

80. The device of claim 79 wherein the diffusing means comprises a diffusing tip.

81. The device of claim 79 wherein the diffusing means diffuses energy to the tissue in a substantially uniform distribution about the diffusing means.

82. The device of claim 64 wherein the distal end of said delivering means is of a construction sufficient for insertion into the tissue.

83. The device of claim 82 wherein the distal end of said delivering means comprises a tissue-puncturing tip.

84. The device of claim 83 wherein the tip is composed of a material having a thermal conductivity sufficient to avoid producing a hot tip during energy delivery to the tissue.

85. The device of claim 64 wherein said delivering means is limited to one usage.

86. The device of claim 64 wherein said transferring means is disposed on said delivering means

such that, upon connection of said delivering means to the energy source, said transferring means is operably connected to the communicating means of the energy source.

87. The device of claim 64 wherein said transferring means and the energy source are operably connectable for communicating data therebetween via means selected from a group consisting of electrical, magnetic and optical means, and any combination thereof.

88. The device of claim 64 wherein said transferring means comprises a microprocessor.

89. The device of claim 64 wherein said transferring means comprises an integrated memory device.

90. The device of claim 89 wherein the memory device comprises an EEPROM integrated circuit.

91. The device of claim 64 wherein the energy source further comprises a key receptacle and said transferring means comprises a key means associated with said delivering means, whereupon manipulation of the key means in the key receptacle, said transferring means is operably connected to the communicating means of the energy source.

92. The device of claim 91 wherein the key means comprises a circuit board including an integrated memory device for electrical coupling with the key receptacle.

93. The device of claim 91 wherein the key means includes an integrated memory device and electri-

cal contacts for electrical coupling with the key receptacle.

94. The device of claim 64 wherein the primary data further includes information selected from a group consisting of delivering means identification, delivering means expiry, delivering means usage, delivering means calibration parameters, type of energy for delivery, operational parameters, energy delivery parameters and monitoring sequence parameters, and any combination thereof.

95. The device of claim 64 wherein the secondary data includes information selected from a group consisting of generating means identification, treatment identification, date of treatment, time of treatment, error indication, error identification, amount of energy delivery, type of treatment, data integrity, and any combination thereof.

96. A disposable device for delivering energy from a source of energy to human tissue, wherein the energy source includes a microprocessor, said device comprising:

an energy delivery device, said delivery device having a connection end of a construction sufficient for connection with the energy source to provide for energy delivery from the energy source to said delivery device and having a distal end for delivery of energy to the tissue; and

a communication device associated with said delivery device and operably connectable to the microprocessor for communicating data therebetween, said communication device including a memory device for storing primary data and for receiving secondary data from the microprocessor, said primary data including

information indicative of usage of said delivery device prior to an energy delivery procedure and said secondary data including information indicative of usage of said delivery device during or following the energy delivery procedure.

97. The device of claim 96 wherein the energy is selected from a group consisting of infrared, radio-frequency and ultrasound energy.

98. The device of claim 96 wherein the energy source is a laser.

99. The device of claim 96 wherein the energy source comprises a female connector for connecting with said delivery device.

100. The device of claim 96 wherein, upon connection of said delivery device to the energy source, electrical contact is established therebetween.

101. The device of claim 96 wherein the microprocessor controls the delivery of energy from the energy source to said delivery device.

102. The device of claim 96 wherein, upon connection of said delivery device to the energy source, the microprocessor provides power to said communication device.

103. The device of claim 96 wherein, upon connection of said delivery device to the energy source, the microprocessor receives the primary data from said communication device.

104. The device of claim 96 wherein, upon connection of said delivery device to the energy source, the microprocessor alters the primary data stored in said communication device.

105. The device of claim 96 wherein, upon connection of said delivery device to the energy source, the microprocessor provides the secondary data to said communication device.

106. The device of claim 96 wherein the microprocessor monitors the energy delivery from the energy source to said delivery device via signals from said communication device.

107. The device of claim 96 wherein the microprocessor monitors the delivery of energy to the tissue via signals from said delivery device.

108. The device of claim 96 wherein said delivery device comprises a male connector at the connection end.

109. The device of claim 96 wherein said delivery device comprises an optical fiber at the distal end.

110. The device of claim 96 wherein said delivery device comprises a diffuser for diffusing energy from the delivery device to the tissue, the diffuser disposed at the distal end of said delivery device.

111. The device of claim 110 wherein the diffuser comprises a diffusing tip.

112. The device of claim 110 wherein the diffuser diffuses energy to the tissue in a substantially uniform distribution about the diffuser.

113. The device of claim 96 wherein the distal end of said delivery device is of a construction sufficient for insertion into the tissue.

114. The device of claim 113 wherein the distal end of said delivery device comprises a tissue-puncturing tip.

115. The device of claim 114 wherein the tip is composed of a material having a thermal conductivity sufficient to avoid producing a hot tip during energy delivery to the tissue.

116. The device of claim 96 wherein said delivery device is limited to one usage.

117. The device of claim 96 wherein said communication device is disposed on said delivery device such that, upon connection of said delivery device to the energy source, said communication device is operably connected to the microprocessor.

118. The device of claim 96 wherein said communication device and the energy source are operably connectable for communicating data therebetween via means selected from a group consisting of electrical, magnetic and optical means, and any combination thereof.

119. The device of claim 96 wherein said communication device comprises a microprocessor.

120. The device of claim 96 wherein said communication device comprises an integrated memory device.

121. The device of claim 120 wherein the memory device comprises an EEPROM integrated circuit.

122. The device of claim 96 wherein the energy source further comprises a key receptacle and said communication device comprises a key associated with said delivery device, whereupon manipulation of the key in the key receptacle, said communication device is operably connected to the microprocessor.

123. The device of claim 122 wherein the key comprises a circuit board including an integrated memory device for electrical coupling with the key receptacle.

124. The device of claim 122 wherein the key includes an integrated memory device and electrical contacts for electrical coupling with the key receptacle.

125. The device of claim 96 wherein the primary data further includes information selected from a group consisting of delivering means identification, delivering means expiry, delivering means usage, delivering means calibration parameters, type of energy for delivery, operational parameters, energy delivery parameters and monitoring sequence parameters, and any combination thereof.

126. The device of claim 96 wherein the secondary data includes information selected from a group consisting of generating means identification, treatment identification, date of treatment, time of

treatment, error indication, error identification, amount of energy delivery, type of treatment, data integrity, and any combination thereof.

127. A method for determining the suitability of a usage-limited energy delivery device for use in an apparatus for applying energy to human tissue, comprising:

providing the apparatus of claim 33, wherein said primary data is stored in the memory device prior to an energy application, said primary data including information indicative of usage of said delivery device prior to the energy application and information selected from a group consisting of an indication of data integrity, an identification of said delivery device, an indication of delivery device expiry, an indication of energy delivery type, delivery device calibration parameters, and any combination thereof;

connecting said connection end of said delivery device to said connector of said generator; and

determining, via said microprocessor, whether said primary data is indicative of suitability or unsuitability for the delivery of energy to the tissue.

128. The method of claim 127, wherein said determining includes determining readability of said primary data.

129. The method of claim 127, wherein said determining includes determining integrity of said primary data.

130. The method of claim 127, wherein said determining includes determining validity of the identification of said delivery device.

131. The method of claim 127, wherein said determining includes determining usage of said delivery device prior to the energy application.

132. The method of claim 127, wherein said determining includes determining an expiry date of said delivery device.

133. The method of claim 127, whereupon determining that said primary data is unsuitable for the delivery of energy to the tissue, further comprising indicating an error condition.

134. The method of claim 127, whereupon determining that said primary data is unsuitable for the delivery of energy to the tissue, further comprising aborting energy delivery.

135. The method of claim 127, whereupon determining that said primary data is suitable for the delivery of energy to the tissue, further comprising determining the type of energy delivery operation allowed, via the microprocessor, according to the primary data.

136. A method of using a usage-limited energy delivery device in an apparatus for applying energy to human tissue, comprising the method of claim 135 and further comprising reading, via said microprocessor, the delivery device calibration parameters stored in the memory device, and determining energy delivery monitoring limits, treatment monitoring limits, and energy delivery, via said microprocessor, according to the delivery device calibration parameters.

137. The method of claim 136, further comprising delivering energy to the tissue.

138. The method of claim 137, further comprising monitoring energy delivery parameters and treatment parameters and comparing same, respectively, to the energy delivery and treatment monitoring limits.

139. The method of claim 138, whereupon determining that the energy delivery parameters are outside the energy delivery monitoring limits or that the treatment parameters are outside the treatment monitoring limits, further comprising indicating an error condition.

140. The method of claim 138, whereupon determining that the energy delivery parameters are outside the energy delivery monitoring limits or that the treatment parameters are outside the treatment monitoring limits, energy delivery is aborted.

141. The method of claim 138, whereupon determining that the energy delivery parameters have reached the energy delivery monitoring limits or the treatment parameters have reached the treatment monitoring limits, the energy delivery is terminated.

142. The method of any one of claims 140 and 141, whereupon the aborting or terminating of energy delivery, respectively, further comprising writing said secondary data to the memory device.

143. The method of claim 142, wherein said secondary data includes information selected from the group consisting of an identification of a type of energy delivery or treatment used in the energy applica-

tion, an identification of said generator used in the energy application, a date of usage of said delivery device in the energy application, a time of usage of said delivery device in the energy application, an indication of usage of said delivery device in the energy application, an indication of any error condition which occurred in the energy application or a lack of any such error condition, an identification of any error condition which occurred in the energy application, an indication of an amount of energy delivered in the energy application, an indication of a number of tissue sites treated in the energy application, an indication of data integrity, and any combination thereof.

144. A method for determining the suitability of a disposable device for delivering energy from a source of energy to human tissue, wherein the energy source includes a microprocessor, comprising:

providing the delivery device of claim 96, wherein said primary data is stored in the memory device prior to an energy application, said primary data including information indicative of usage of said delivery device prior to an energy delivery procedure and information selected from a group consisting of an indication of data integrity, an identification of said delivery device, an indication of delivery device expiry, an indication of energy delivery type, delivery device calibration parameters, and any combination thereof;

connecting the delivery device to the source of energy; and

determining, via said microprocessor, whether said primary data is indicative of suitability or unsuitability for the delivery of energy to the tissue.

145. The method of claim 144, wherein said determining includes determining readability of said primary data.

146. The method of claim 144, wherein said determining includes determining integrity of said primary data.

147. The method of claim 144, wherein said determining includes determining validity of the identification of said delivery device.

148. The method of claim 144, wherein said determining includes determining usage of said delivery device prior to the energy application.

149. The method of claim 144, wherein said determining includes determining an expiry date of said delivery device.

150. The method of claim 144, whereupon determining that said primary data is unsuitable for the delivery of energy to the tissue, further comprising indicating an error condition.

151. The method of claim 144, whereupon determining that said primary data is unsuitable for the delivery of energy to the tissue, further comprising aborting energy delivery.

152. The method of claim 144, whereupon determining that said primary data is suitable for the delivery of energy to the tissue, further comprising determining the type of energy delivery operation allowed, via the microprocessor, according to the primary data.

153. A method of using a disposable delivery device for delivering energy from a source of energy to human tissue, comprising the method of claim 152 and further comprising reading, via said microprocessor, delivery device calibration parameters stored in the memory device, and determining energy delivery monitoring limits, treatment monitoring limits, and energy delivery, via said microprocessor, according to the delivery device calibration parameters.

154. The method of claim 153, further comprising delivering energy to the tissue.

155. The method of claim 154, further comprising monitoring energy delivery parameters and treatment parameters and comparing same, respectively, to the energy delivery and treatment monitoring limits.

156. The method of claim 155, whereupon determining that the energy delivery parameters are outside the energy delivery monitoring limits or that the treatment parameters are outside the treatment monitoring limits, further comprising indicating an error condition.

157. The method of claim 155, whereupon determining that the energy delivery parameters are outside the energy delivery monitoring limits or that the treatment parameters are outside the treatment monitoring limits, energy delivery is aborted.

158. The method of claim 155, whereupon determining that the energy delivery parameters have reached the energy delivery monitoring limits or the treatment parameters have reached the treatment monitoring limits, the energy delivery is terminated.

159. The method of any one of claims 157 and 158, whereupon the aborting or terminating of energy delivery, further comprising writing said secondary data to the memory device.

160. The method of claim 159, wherein said secondary data includes information selected from the group consisting of an identification of a type of energy delivery or treatment used in the energy delivery procedure, an identification of the source of energy used in the energy delivery procedure, a date of usage of said delivery device in the energy delivery procedure, a time of usage of said delivery device in the energy delivery procedure, an indication of usage of said delivery device in the energy delivery procedure, an indication of any error condition which occurred in the energy delivery procedure or a lack of any such error condition, an identification of any error condition which occurred in the energy delivery procedure, an indication of an amount of energy delivered in the energy delivery procedure, an indication of a number of tissue sites treated in the energy delivery procedure, an indication of data integrity, and any combination thereof.